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**Statement of
Michael D. Griffin
Administrator
National Aeronautics and Space Administration
before the
Committee on Science
House of Representatives**

Mr. Chairman and Members of the Committee, thank you for this opportunity to appear today to share with the Committee information regarding NASA's stake in and commitment to the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Nunn-McCurdy certification.

The NASA role in the NPOESS program, in accordance with Presidential Decision Directive/NSTC-2, is to facilitate the development and insertion of new cost-effective technologies that will enhance the ability of the converged system to meet its operational requirements. NASA's primary stake in the NPOESS program is a scientific one; we look to NPOESS to provide long-term continuity of measurement of key climate parameters, many of which were initiated or enhanced by NASA's Earth Observing System. Toward this end, NASA has also entered into a partnership with the NPOESS Integrated Program Office (IPO) for the NPOESS Preparatory Project (NPP).

NASA is committed to doing its part as a technology provider to make the NPOESS program, as restructured in the Nunn-McCurdy certification, succeed in collaboration with NOAA and the DoD. Below, I will address the two primary features of the Nunn-McCurdy certified program of critical importance to NASA: the NPP mission and the continuity of long-term climate measurements.

NPOESS Preparatory Project

The mission of the NPP is twofold; first to provide continuity for a selected set of calibrated observations with the existing Earth Observing System measurements for Earth Science research, and secondly to provide risk reduction for four of the key sensors flying on NPOESS as well as the command and data handling system. The NASA-managed NPP project is a joint project between the NPOESS IPO and NASA.

For NPP, NASA is providing the Spacecraft bus, the Advanced Technology Microwave Sounder (ATMS) sensor, and the launch services for NPP. The spacecraft bus is complete and the ATMS flight unit was delivered to the spacecraft integrator in October

of 2005 for integration. The project is awaiting delivery of the IPO provided sensors so that final integration and testing can be completed.

The IPO's delivery of the Visible/Infrared Imaging Radiometer Suite (VIIRS) instrument is on the critical path for the NPP launch. The development of this instrument for both NPP and NPOESS is continuing, with delivery of the sensor anticipated at the earliest, technically feasible date, for a September 2009 NPP launch. This represents nearly a three year slip from the originally planned launch in October 2006. The launch of the first operational NPOESS spacecraft is delayed until 2013. NPP's planned launch in advance of NPOESS will ensure that NPOESS data products can be fully evaluated as to their effectiveness in providing the continuity of climate-quality data records.

It is NASA's understanding that the IPO provided elements of the NPP mission will be adequately supported within the certified NPOESS program to ensure the launch of the NPP in September 2009. To support continuation of the 30-year record of NASA and NOAA ozone profile measurements, it is essential that the already completed OMPS (limb) sensor complete testing and integration onto the NPP spacecraft as previously planned.

Continuity of Long-term Climate Measurements

The NPOESS program in the Nunn-McCurdy certification configuration includes advances in the measurement of key climate parameters through the inclusion of the VIIRS, CrIS, ATMS and OMPS (Nadir) instruments. Nevertheless, the decision during the Nunn-McCurdy process to place the highest priority on continuity of legacy operational measurement capabilities resulted in a lower priority for a number of environmental and climate measurement capabilities. Many of these measurements have been demonstrated in recent years on NASA's Earth Observing System platforms and are being widely used by researchers. Difficult choices and trade-offs had to be made and the cost to procure several of the secondary sensors that provide climate and space weather observations is not included in the certified program. However, the program will plan for and fund the integration of these sensors on the spacecraft. For example, some of these sensors provide climate measurements such as the Earth's energy balance, atmospheric ozone profiles, and solar energy input to the Earth, some of which have 30-year data records. These climate measurements are important to the public by providing a better understanding of atmospheric greenhouse effects, Earth ozone levels, and subtle changes in solar energy input that can have dramatic impacts on the overall climate.

The certified NPOESS program also relies on the European MetOp satellites to cover the mid-morning NOAA orbit. MetOp will carry an older, less capable imaging instrument than NPOESS. The first of these European satellites, MetOp A is planned for launch in 2006 and will provide that coverage. NOAA is relying on its one remaining POES satellite (NOAA N') to provide operational coverage of the NOAA afternoon orbit until the launch of the first NPOESS spacecraft, C1, in 2013. Depending on the lifetime of NOAA-N' there is a possibility of a short gap in operational coverage. However, NASA

has agreed to fly NPP in the same afternoon orbit, and although it is not designed as an operational system, it could provide partial coverage until the launch of C1.

NOAA, NASA and DoD will be working together on a mitigation strategy to lessen any impacts, including working with our international partners. The NPOESS spacecraft will be built with the capability to house all of the sensors and the program budget will include the dollars to integrate them on the spacecraft. This decision was made because the EXCOM agreed any additional funding gained through contract renegotiation or in unutilized management reserve would be used to procure these secondary sensors. NASA's plans in this regard will be guided by the forthcoming Earth science decadal survey now underway by the National Academy of Sciences. The science community, through this NRC decadal survey activity, has already registered its concerns with unmet expectations for key climate measurements in their interim report, and changes in climate capabilities in the revised NPOESS configuration will factor into their final report.

Given the new priorities that resulted from the Nunn-McCurdy process, NASA looks forward to continuing to work with our NPOESS partners to successfully implement changes in response to the recent reviews of the program. The recommendations of the Department of Commerce Inspector General's (DOCIG) report are being addressed by a number of recommendations by the Nunn-McCurdy review team. First, the implementation of a Program Executive Officer (PEO) structure assists in providing better leadership, oversight, and communication with the EXCOM. Second, the program reviews should provide consistent feedback and increased visibility to the EXCOM on the status of the program. Third, the management challenge provided to the IPO to consider an award fee restructure and increase scrutiny of the award fee decisions are necessary steps towards addressing the Commerce Inspector General's report

The NPOESS Nunn-McCurdy process has been inclusive and NASA has been an active participant. NASA remains committed to the tri-agency partnership and will endeavor to meet our obligations in support of both NPP and NPOESS.

Once again, thank you for the opportunity to testify today. I appreciate the support of Congress and this Committee and would be pleased to answer any questions.